

## **REMARKS/ARGUMENT**

Claims 2-14 and 19-23 stand allowed.

Applicants appreciate Examiner's determination that claims 17 & 18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph. Claims 17 and 18 (through dependency) have been amended better to define the claimed invention and overcome the 35 U.S.C. 112, second paragraph, rejections. Accordingly, Claims 17 and 18 are allowable.

Claims 16 and 25 have been amended better to define the claimed invention and overcome the 35 U.S.C. 112, second paragraph, rejections.

Claims 24 and 25 have been amended better to define the claimed invention and overcome the 35 U.S.C. 112, first paragraph, rejections.

Claim 15 has been amended better to define the claimed invention and overcome the 35 U.S.C. 101 rejection. Claim 15, as amended, requires and positively recites, a method, comprising the steps of: **"providing a memory device"** and **"sending a write address, I, to the memory device equal to:  $I = kJ + P$ , where J is defined as  $3 \cdot 2^n$  or  $9 \cdot 2^n$ ;  $P = A_i/2^m$  and  $A_i$  is the requested address;  $k = \text{BROM}(A_i \bmod 2^m)$ ; and  $\text{BROM}(y) = \text{bit-reversed } m\text{-LSBs of } y$ "**. Claim 15, as amended, contains patentable utility.

Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al US Patent No. 6,668,343. Applicants respectfully traverse this rejection, as set forth below.

In order that the rejection of Claim 25 be sustainable, it is fundamental that "each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

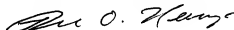
Claim 25, as amended, requires and positively recites, a modulator circuit, comprising: "a memory for storing interleaved data, the memory having a write address port and a read address port", **"a write address generator coupled to the write address port"** and **"a read address generator coupled to the read address port"**.

In contrast, Kim discloses in Fig. 1, an address generator 111 coupled to the read address of interleaver memory 112 and thereafter in Fig. 2, discloses an address generator 211 coupled to the write address of deinterleaver memory 212. Examiner is treating interleaver memory 112 and deinterleaver memory as being one and the same memory coupled to both address generators 111 and 211. Kim, however, makes it very clear that while deinterleaver 212 has the same structure as interleaver 112, the two have reverse operations to each other (col. 5, lines 33-35). More specifically, Kim states that deinterleaver 212 is different from interleaver 112 in that the input data has different sequences in both the read and write modes (col. 5, lines 35-37). Accordingly, neither interleaver memory 112 or deinterleaver memory 212 is coupled to BOTH address generator 111 and address generator 211. Accordingly, each and every element of Claim 25 cannot be found in Kim. The 35 U.S.C. 102(e) rejection is improper and must be withdrawn.

An amendment after a final rejection should be entered when it will place the case either in condition for allowance or in better form for appeal. 37 C.F.R. 1.116; MPEP 714.12. The proposed amendment does not introduce new matter. Applicants believe this amendment places the case in condition for allowance. At a minimum, the amendment should be entered since it reduces the number of issues on appeal (objection to drawings is overcome).

Claims 2-14 and 19-23 stand allowed. Claims 15-18, 24 and 25, as amended, stand allowable. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,



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